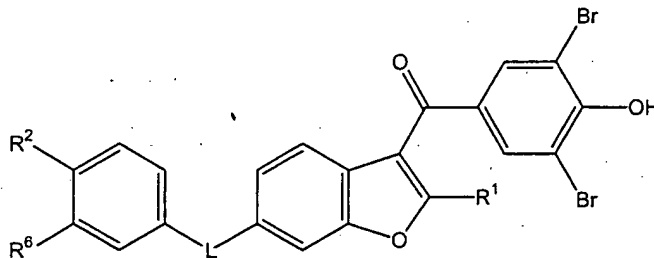


WHAT IS CLAIMED IS:

1. A compound that inhibits PTP-1B and that interacts with at least one of the PTP-1B exosite-forming residues.
2. A compound that inhibits TC-PTP and that interacts with at least one of the TC-PTP exosite-forming residues.
3. A compound having the structure having the structure



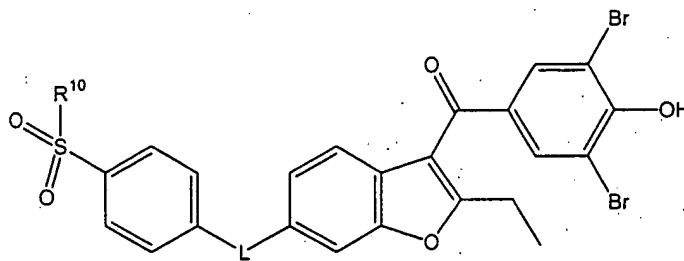
wherein:

- $R^1$  is hydrogen, methyl, ethyl, or propyl;  
 $R^2$  is hydrogen,  $-S(O_2)R^3$ ,  $-NH(C(=O)R^3)$ ,  $-NH(C(=O)CH_2(C(=O)OR^3)$ ,  $-S(O_2)NR^4R^5$ , or  $-NR^4S(O_2)R^3$  where  $R^3$  is  $C_1$ - $C_5$  alkyl,  $R^4$  is hydrogen,  $C_1$ - $C_5$  alkyl, unsubstituted cyclic moiety, or substituted cyclic moiety, and  $R^5$  is either hydrogen or  $R^5$  and  $R^4$  together form an unsubstituted cyclic moiety or a substituted cyclic moiety;  
 $R^6$  is hydrogen or alternatively when  $R^2$  is  $-NR^4S(O_2)NR^3$ , then  $R^6$  and  $R^4$  together form an unsubstituted cyclic moiety or substituted cyclic moiety; and  
 $L$  is  $-NHS(O_2)-$  or  $-S(O_2)NR^7CH_2-$  where  $R^7$  is hydrogen or  $C_1$ - $C_5$  alkyl.

4. The compound of claim 3 wherein the one or more substituents on the substituted cyclo group are each independently selected from the group consisting of:  $C_1$ - $C_5$  alkyl, phenyl, benzyl, F, Cl, I, Br,  $-OH$ ;  $-NO_2$ ;  $-CN$ ;  $-CF_3$ ;  $-CH_2CF_3$ ;  $-CH_2Cl$ ;  $-CH_2OH$ ;  $-CH_2CH_2OH$ ;  $-CH_2NH_2$ ;  $-CH_2SO_2CH_3$ ;  $-OR^8$ ;  $-C(O)R^8$ ;  $-COOR^8$ ;  $-C(O)NR^8R^9$ ;

$-\text{OC}(\text{O})\text{R}^8$ ;  $-\text{OCOOR}^8$ ;  $-\text{OC}(\text{O})\text{NR}^8\text{R}^9$ ;  $-\text{NR}^8\text{R}^9$ ;  $-\text{S}(\text{O})_2\text{R}^8$ ; and  $-\text{NR}^8\text{C}(\text{O})\text{R}^9$  where  $\text{R}^8$  and  $\text{R}^9$  are each independently hydrogen,  $\text{C}_1\text{-C}_5$  alkyl, phenyl or benzyl.

5. The compound of claim 3 wherein  $\text{R}^2$  and  $\text{R}^6$  are both hydrogen.
6. The compound of claim 3 wherein  $\text{R}^2$  is  $-\text{S}(\text{O}_2)\text{NHR}^5$  where  $\text{R}^5$  is an unsubstituted cyclic moiety or substituted cyclic moiety, and  $\text{R}^6$  is hydrogen.
7. The compound of claim 3 wherein  $\text{R}^2$  is  $-\text{S}(\text{O}_2)\text{R}^3$  where  $\text{R}^3$  is methyl, ethyl, or propyl, and  $\text{R}^6$  is hydrogen.
8. The compound of claim 3 wherein  $\text{R}^2$  is  $-\text{NH}(\text{C}=\text{O})\text{R}^3$  where  $\text{R}^3$  is methyl, ethyl, or propyl, and  $\text{R}^6$  is hydrogen.
9. The compound of claim 3 wherein  $\text{R}^2$  is  $-\text{NH}(\text{C}=\text{O})\text{CH}_2(\text{C}=\text{O})\text{OR}^3$  where  $\text{R}^3$  is methyl, ethyl, or propyl, and  $\text{R}^6$  is hydrogen.
10. The compound of claim 3 wherein  $\text{R}^2$  is  $-\text{NR}^4\text{S}(\text{O}_2)\text{R}^3$  wherein  $\text{R}^3$  is methyl and  $\text{R}^4$  and  $\text{R}^6$  together form an unsubstituted heterocycle or a substituted heterocycle.
11. A compound having the structure



wherein:

$\text{R}^{10}$  is  $\text{C}_1\text{-C}_5$  alkyl or  $\text{NHR}^{11}$  where  $\text{R}^{11}$  is hydrogen,  $\text{C}_1\text{-C}_{10}$  alkyl or aryl; and,  
 $\text{L}$  is  $-\text{NHS}(\text{O}_2)-$  or  $-\text{S}(\text{O}_2)\text{N}(\text{CH}_2)_3\text{CH}_2-$ .

12. The compound of claim 11 wherein  $R^{10}$  is methyl, ethyl or propyl.
13. The compound of claim 11 wherein  $R^{10}$  is  $NHR^{11}$  and  $R^{11}$  is hydrogen.
14. The compound of claim 11 wherein  $R^{10}$  is  $NHR^{11}$  and  $R^{11}$  is aryl.
15. The compound of claim 19 wherein  $R^{11}$  is phenyl.
16. The compound of claim 19 wherein  $R^{11}$  is heteroaryl.
17. An exosite mutant of PTP-1B.
18. An exosite mutant of TC-PTP.
19. A pharmaceutical composition comprising an effective amount of a compound of any one of claims 1-3, and 11, or a prodrug or pharmaceutically acceptable derivative thereof, in admixture with a pharmaceutically acceptable carrier.
20. A method of identifying an exosite inhibitor of PTP-1B comprising
  - a) contacting a test compound with PTP-1B;
  - b) contacting the test compound with an exosite mutant of PTP-1B; and
  - c) comparing the activity of PTP-1B in the presence of the test compound with the activity of the exosite mutant of PTP-1B in the presence of the test compound.
21. A method of identifying an exosite inhibitor of TC-PTP comprising
  - a) contacting a test compound with TC-PTP;
  - b) contacting the test compound with an exosite mutant of TC-PTP; and
  - c) comparing the activity of TC-PTP in the presence of the test compound with the activity of the exosite mutant of TC-PTP in the presence of the test compound.

22. A method for treating type 2 diabetes, or a pathologic condition associated with type 2 diabetes, comprising administering to a subject in need thereof a therapeutically effective amount of a PTP-1B exosite inhibitor of claim 1.
23. The method of claim 22 wherein the pathologic condition associated with type 2 diabetes is insulin resistance.
24. A method for treating inflammation is provided comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.
25. A method for treating an immune system disorder comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.
26. A method for treating a hematopoiesis disorder comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.